

Remarks

The present application is related to co-pending and commonly owned U.S. Patent App. No. 10/077,149, entitled Telecommunications Overlay System, filed February 15, 2002.

The Examiner's Office action mailed March 2, 2005, which rejected allowed pending claims 27-46 and 78-93, rejected pending claims 1-12, 17-19, 22, 47, 49, 51, 55-64, 66, 68-70, 73, 94, 96, and 98, and objected to pending claim 13-16, 20, 21, 23-26, 48, 50, 52-54, 65, 67, 71, 72, 74-77, 95, 97, and 99-101, has been reviewed, and certain amendments have been made to the application. In view of the following remarks, Applicants respectfully submit that the application is in condition for allowance.

The Examiner required "MMDS" to be changed to --multichannel multipoint distribution service-- in claims 2, 56, 66, and 87. That change has been made.

The Examiner rejected claims 1, 3-12, 17-19, 22, 47, 51, 55-64, 68-70, 73, 94, and 98 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,285,669, issued to Gutierrez ("Gutierrez"). The Examiner rejected claims 2, 49, 56, 66, and 96 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,285,669, issued to Gutierrez ("Gutierrez").

Regarding claims 1, 47, 55, and 94, Gutierrez does not teach creating or receiving, respectively, a wireless complementary signal. Gutierrez teaches creating an overlay signal that is non-orthogonal, partially orthogonal, or orthogonal to the underlay signal. See Column 7, lines 9-39. The orthogonal overlay signals are created using Walsh codes. Column 8, lines 43-50.

Applicants format signals according to protocols used with overlay systems, such as a CDMA system, an orthogonal frequency division multiplexing (OFDM) system, and an ultra wide band (UWB) system. See Application, page 12, lines 19-21. Thus, Applicants recognize orthogonal systems. However, regardless of whether or not the overlay signals are formatted according to an orthogonal system, the overlay signals must be complimentary to the underlay signals.

Figure 2 of the Applicants' application provides an example of a complimentary signal. Page 20, line 1-page 21, line 8 describes the complimentary signal and benefits of the complimentary signal. When examining claims for patentability, claims are interpreted as broadly as is reasonable and consistent with the specification. *In re Thrift*, 63 USPQ2d 2002, 2006 (Fed. Cir. 2002).

Gutierrez does not disclose, teach, or suggest the system of Applicants' claims 1, 47, 55, and 94. Therefore, Applicants submit that claims 1, 47, 55, and 94 are allowable. Withdrawal of the rejection respectfully is requested.

Because the claims depending directly or indirectly from claims 1, 47, 55, and 94 include all of the limitations of their respective base claims, which are believed to be patentable, these claims also are believed to be allowable. Withdrawal of the rejections of those claims depending from claims 1, 47, 55, and 94 respectfully is requested.

Because claims 1, 47, 55, and 94 are believed patentable, it is not necessary to discuss patentable limitations of claims depending there from or the reference or rejection. The lack of a discussion of patentable limitations of those dependent claims should not be construed to mean that there are not patentable limitations in those dependent claims.

Although it is believed that a discussion of all dependent claims is not required, Applicant will address a few specific claims.

Regarding claim 3, the Examiner cited column 7, lines 1-8 and lines 60-65 for the proposition that Gutierrez teaches a narrowband signal. Applicants dispute this.

At column 6, lines 58-64, Gutierrez states the following: "FIG. 1D illustrates frequency spectrum occupied by a communication system in which underlay transmissions are conveyed by three carriers, each separated in frequency. For CDMA, each carrier occupies a bandwidth approximately given by the chip rate of the spread spectrum system. Thus, the spectrum of each underlay carrier is defined by the respective chipping rate."

At column 7, lines 1-7, Gutierrez states the following: "FIG. 1E illustrates frequency spectrum occupied by a communication system which includes three adjacent underlay carriers and a overlay carrier. The overlay carrier occupies three times the bandwidth of the underlay carriers and shares the spectrum with the three underlay carriers. To achieve this three time bandwidth, the overlay transmissions employ a chipping rate three times as great as the chipping rate of that employed on the underlay transmissions."

Gutierrez teaches using a CDMA system for both underlay and overlay carriers. Gutierrez teaches changing the chipping rate when multiple underlay carriers are adjacent an overlay carrier. Gutierrez does not teach modulating a first signal according to a protocol used for a narrowband signal, as required in Applicants' claim 3. Applicants request withdrawal of this rejection.

Regarding the rejection of claims 18, 19, 69, and 70, Gutierrez does not teach a controller configured to dynamically determine at least one complementary transmission level for the first signal or the second signal. As explained above, Gutierrez teaches orthogonal overlay signals, not complimentary overlay signals. Gutierrez teaches generating Walsh codes for the orthogonal signals at column 11, lines 38 to column 12, line 65. Gutierrez does not teach determining a complimentary transmission level, dynamically or otherwise. Applicants request withdrawal of this rejection.

Regarding the rejection of claims 2, 49, 56, 66, and 96 under 35 U.S.C. § 103(a), Applicants traverse this rejection. The Examiner stated "Given that protocols change over time, it is inappropriate to have the scope of a claim change with time." Office action, page 6, lines 6-7. The Examiner further stated that it would have been an obvious matter of design choice to use the protocol available at the time the invention was made to perform the function of the claimed invention.

Applicants submit that neither of these are valid reasons to modify the cited reference to reach the claimed limitations. To establish a *prima facie* case of obviousness, the Examiner must show some objective teaching in the prior art that would lead would lead one of ordinary skill in the art to modify the teachings of the cited reference. See *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Under an obviousness rejection, there must be a search and analysis of the prior art, including evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine or modify the references relied on as evidence of obviousness. See *In re Lee*, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). The Examiner must show reasoned findings. *In re Lee*, 61 USPQ2d at 1434. Conclusory statements from the Examiner do not adequately address the issue of motivation to combine. *In re Lee*, 61 USPQ2d at 1434. This factual inquiry of motivation is material to patentability, and can not be resolved on subjective belief and unknown authority. *In re Lee*, 61 USPQ2d at 1434.

The Examiner must provide particular findings related to the showing of the motivation to combine. *In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). Broad, conclusory statements standing alone are not "evidence." *In re Kotzab*, 55 USPQ2d at 1317.

The Examiner's belief that it is inappropriate for Applicants to include a protocol name in a claim is not a rejection based on any acceptable MPEP section or Federal Circuit law, and Applicants contend that it violates *In re Thrift*, *In re Lee*, and *In re Kotzab*, all cited above. The

scope of the claim does not change over time just because a protocol name is in the claim. The scope of the claim is the same. The Examiner did not provide any MPEP section or Federal Circuit law to support this conclusory statement.

Appellants further contend that the Examiner's rejection based on "obvious design choice" is not a valid rejection, is a conclusory statement, and does not include reasoned findings on the record as required by *In re Thrift*, *In re Lee*, and *In re Kotzab*, all cited above. Applicants contend that one cannot simply select an MMDS based system, a CDMA based system, or possibly a TDMA based system or other system as a matter of design choice. Each type of wireless or wireline system has particular system requirements which may not be compatible with other protocols. Different system components are required for each protocol. System components and systems designs are not interchangeable. Applicants request withdrawal of this rejection of claims 2, 49, 56, 66, and 96 under 35 U.S.C. § 103(a).

Applicants thank the examiner for the allowance of claims 27-46 and 78-93.

The references cited by the Examiner and made of record have been reviewed by Applicants. Applicants have no further remarks with regard to cited references.

Based on the foregoing, it is submitted that the Applicants' invention as defined by the claims is patentable over the references of record. Issuance of a Notice of Allowance is solicited.

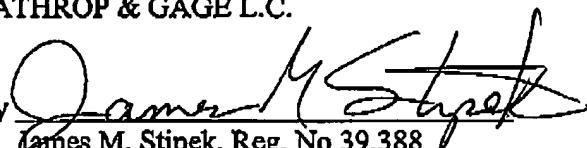
Applicants' attorney welcomes the opportunity to discuss the case with the Examiner in the event that there are any questions or comments regarding the response or the application.

This is intended to be a complete response to the Examiner's Office action mailed on March 2, 2005.

Respectfully Submitted,

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